

**WHAT IS CLAIMED IS:**

1. A generator, comprising:

a housing;

an engine mounted in the housing;

5 a first main impeller rotatably mounted in the engine;

a first secondary impeller rotatably mounted in the housing and  
located outside of the engine;

a generating body mounted in the housing and connected to the  
engine;

10 a second main impeller rotatably mounted in the generating body;  
and

a second secondary impeller rotatably mounted in the housing and  
located outside of the generating body.

2. The generator in accordance with claim 1, wherein the first  
15 secondary impeller is co-axial with the first main impeller.

3. The generator in accordance with claim 1, wherein the first  
secondary impeller has a size greater than that of the first main impeller.

4. The generator in accordance with claim 1, wherein the second  
secondary impeller is co-axial with the second main impeller.

20 5. The generator in accordance with claim 1, wherein the second  
secondary impeller has a size greater than that of the second main impeller.

6. The generator in accordance with claim 1, wherein the first secondary impeller is operated with the engine synchronously.

7. The generator in accordance with claim 1, wherein the second secondary impeller is operated with the generating body synchronously.